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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/648,313

08/27/2003

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EXAMINER

KHAN, USMAN A

ART UNIT

PAPER NUMBER

2622

NOTIFICATION DATE

DELIVERY MODE

10/07/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/648,313	Applicant(s) MOGAMIYA ET AL.	
	Examiner USMAN KHAN	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>04/09/2008</u> | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed on 07/07/2008 with respect to claims **1 - 8** has been considered have been considered but are not persuasive.

With respect to **claims 9 - 17** have been considered but are moot in view of the new ground(s) of rejection.

Also, newly added **claims 18 – 22** are rejected as discussed below.

Regarding objection to specification provided in the previous office action for failing to provide a descriptive title. Applicant has amended the title of the invention hence the objection to the title is withdrawn.

Please refer to the following office action, which clearly sets forth the reasons for non-persuasiveness.

Regarding **claim 1 - 7**, Applicant argues that the applied KABE reference (as shown, e.g., in Figs. 2- 4) merely discloses a lens barrel extending the length of the optical system as the "sealing member." Thus, this "sealing member" as identified by the Examiner does not extend between and include the shutter 16 and the image pickup element 18, but rather extends outside these components. Therefore, Applicants respectfully submit that KABE fails to teach or render obvious the sealing member extending between and including the shutter and the image pickup element as recited in

Art Unit: 2622

claim 1.

In response to applicant's argument that the examiner notes that there is no limitation in the claim to limit the sealing to extend **ONLY** between and include the shutter 16 and the image pickup element 18, i.e. there is no limitation to limit the sealing from extending to the outside of the shutter and the image pickup element.

DETAILED ACTION

Claim 2 is objected to because of the following informalities: claim 2 line 3 should be amended to “extending from the shutter **to** the image pickup element.”. Appropriate correction is required.

Claim 4 is objected to because of the following informalities: claim 4 line 3 should be amended to “extending from the shutter **to** an image pickup surface of the image pickup element, wherein”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 - 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kabe et al. (US PgPub 2001/0017984).

Regarding **claim 1**, Kabe et al. discloses an electronic still camera comprising: an image pickup element provided in an optically isolated space (figures 2 – 4 item 18) which is opened and closed by a shutter (figures 2 – 4 item 16); an image pickup optical system which makes object light incident upon the image pickup element (figures 2 – 4 sending light from opening near item 55 to the image pickup element 18 via a number of lenses); and a sealing member extending between and including the shutter and the image pickup element, and configured to seal an image pickup light path extending from the shutter to the image pickup element (figures 2 – 4, lens barrel outer surface i.e. items 22, 24, and other outer components of the lens barrel).

Regarding **claim 2**, Kabe et al. discloses the electronic still camera according to claim 1, wherein said sealing member comprises a tubular member which surrounds a light path space extending from the shutter and the image pickup element (figures 2 – 4, lens barrel outer surface i.e. items 22, 24, and other outer components of the lens barrel).

Regarding **claim 3**, Kabe et al. discloses the electronic still camera according to claim 2, wherein said tubular member is configured to be extendable and contractible in an optical axis direction of the image pickup optical system (figures 2 – 4, lens barrel contracts and expands); and wherein an optical element is fitted in an opening of said tubular member on an object side to seal the tubular member (figures 2 – 4, item 52 and other optical elements such as figures 2 – 4 items 46, 48, and 50).

Regarding **claim 4**, Kabe et al. discloses the electronic still camera according to claim 1, wherein said sealing member comprises a tubular member which surrounds a light path space extending from the shutter and an image pickup surface of the image pickup element (figures 2 – 4, lens barrel outer surface i.e. items 22, 24, and other outer components of the lens barrel), wherein said tubular member is extendable and contractible in an optical axis direction of the image pickup optical system (figures 2 – 4, lens barrel contracts and expands), said tubular member being closely connected (figures 2 – 4, lens barrel outer surface i.e. items 22, 24, and other outer components of the lens barrel), at the end thereof which defines an opening end on the object side (figures 2 – 4 sending light from opening near item 55 to the image pickup element 18 via a number of lenses), to a frame member (figures 2 – 4, lens barrel outer surface i.e. items 22, 24, and other outer components of the lens barrel), which restricts an aperture which is opened and closed by the shutter (figures 2 – 4 item 16), and an optical element which seals the frame member (figures 2 – 4, item 52 and other optical elements such as figures 2 – 4 items 46, 48, and 50).

Regarding **claim 5**, Kabe et al. discloses the electronic still camera according to claim 3, wherein said tubular member is in close contact, at an end surface thereof defining the opening on the object side, with the frame member which restricts the aperture opened and closed by the shutter (figures 2 – 4 barrel outer surface i.e. items

Art Unit: 2622

22, 24, and other outer components of the lens barrel along with sending light from opening near item 55 to the image pickup element 18 via a number of lenses).

Regarding **claim 6**, Kabe et al. discloses the electronic still camera according to claim 3, wherein said optical element is secured to the frame member (figures 2 – 4, barrel outer surface i.e. items 22, 24, and other outer components of the lens barrel along with item 52 and other optical elements such as figures 2 – 4 items 46, 48, and 50).

Regarding **claim 7**, Kabe et al. discloses the electronic still camera according to claim 3, wherein said optical member is a transparent plane-parallel plate (figures 2 – 4, item 52 and other optical elements such as figures 2 – 4 items 46, 48, and 50).

Claims 1 – 2, 5, 9 – 17 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Kato et al. (US PgPub 2003/0001960).

Regarding **claim 1**, Kato et al. discloses an electronic still camera (figure 7) comprising: an image pickup element (figure 7 items 130 and 130a) provided in an optically isolated space (figure 7 items 142 and 143) which is opened and closed by a shutter (figure 7 items 125 with items 126 and 127); an image pickup optical system which makes object light incident upon the image pickup element (figure 7); and a sealing member extending between and including the shutter and the image pickup element, and configured to seal an image pickup light path extending from the shutter to

Art Unit: 2622

the image pickup element (figure 7 items 142 and 143).

Regarding **claim 2**, Kato et al. discloses the electronic still camera according to claim 1, wherein said sealing member comprises a tubular member which surrounds a light path space extending from the shutter and the image pickup element (figure 7 items 142 and 143).

Regarding **claim 5**, Kato et al. discloses the electronic still camera according to claim 3, wherein said tubular member is in close contact, at an end surface thereof defining the opening on the object side, with the frame member which restricts the aperture opened and closed by the shutter (figure 7 items 142 and 143).

Regarding **claim 9**, Kato et al. discloses an electronic still camera (figure 7) comprising: an image pickup element (figure 7 items 130 and 130a) provided in an optically isolated space (figure 7 items 142 and 143) which is opened and closed by a shutter (figure 7 items 125 with items 126 and 127); an image pickup optical system configured to make object light incident upon the image pickup element (figure 7); and a frame member configured to restrict an aperture which is opened and closed by the shutter (figure 7 items 142 and 143), said frame member being provided with at least one of a low-pass filter and an infrared absorption filter secured thereto (figure 7 items 128 – 129).

Regarding **claim 10**, Kato et al. discloses that the electronic still camera according to claim 9, wherein said low-pass filter and the infrared absorption filter are cemented to each other (figure 7 items 128 – 129).

Regarding **claim 11**, Kato et al. discloses that the electronic still camera according to claim 9, wherein said low-pass filter is closely secured to the frame member which is located closer to the image pickup element than the shutter (figure 7 items 128 – 129 more specifically item 129 and items 130 and 130a).

Regarding **claim 12**, Kato et al. discloses that the electronic still camera according to claim 9, wherein said infrared absorption filter is secured to the frame member, the frame member located closer to the image pickup element than the shutter (figure 7 items 128 – 129 more specifically item 129 and items 130 and 130a).

Regarding **claim 13**, Kato et al. discloses that the electronic still camera according to claim 9, wherein one of said low- pass filter and said infrared absorption filter is secured to the frame member, is the frame member located closer to an object than the shutter (figure 7 items 128 – 129).

Regarding **claim 14**, Kato et al. discloses that the electronic still camera according to claim 9, wherein said infrared absorption filter is secured to the frame member, is the frame member located closer to an object than the shutter (figure 7

Art Unit: 2622

items 128 – 129).

Regarding **claim 15**, Kato et al. discloses that the electronic still camera according to claim 1, further comprising an optical filter fitted in an opening at an object side of said sealing member (figure 7 items 128 – 129).

Regarding **claim 16**, Kato et al. discloses that the electronic still camera according to claim 9, wherein said frame member is provided at an object side of the optically isolated space (figure 7 items 142 and 143).

Regarding **claim 17**, Kato et al. discloses that the electronic still camera according to claim 9, wherein said frame member supports the shutter (figure 7 items 142 and 143 also items 125 with items 126 and 127).

Regarding **claim 22**, Kato et al. discloses that the electronic still camera according to claim 9, wherein the shutter is mounted on the frame member (figure 7 items 125 with items 126 and 127).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2622

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kabe et al. (US PgPub 2001/0017984) in further view of Oguma (US patent No. 6,225,244).

Regarding **claim 8**, as mentioned above in the discussion of claim 3, Kabe et al. teaches all of the limitations of the parent claim. However, Kabe et al. fails to disclose that the said optical element comprises at least one of a low-pass filter and an infrared absorption filter. Oguma, on the other hand discloses that the said optical element comprises at least one of a low-pass filter and an infrared absorption filter.

More specifically, Oguma discloses that said optical element comprises a low-pass filter and an infrared absorption filter (figure 1 items 2, 2', and 3).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate the teachings of Oguma with the teachings of Kabe et al. because in column 2 lines 15 - 27 Oguma discloses that the use a low-pass filter and an infrared absorption filter will provide the following advantage: providing a glass for a near infrared absorption filter, which is durable in use for a long period of time, has high climate resistance and a high transmittance to light in ultraviolet to visible light regions and has excellent alkali resistance. This will improve functionality of the camera of Kabe et al.

Claims 18 - 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato et al. (US PgPub 2003/0001960) in further view of Yoshino et al. (US patent No. 3,975,750).

Regarding **claim 18**, as mentioned above in the discussion of claim 1, Kato et al. teaches all of the limitations of the parent claim. However, Kato et al. fails to disclose that the said sealing member is elastic. Yoshino et al., on the other hand discloses that the sealing member is elastic

More specifically, Yoshino et al. discloses that the sealing member is elastic (figure 11 item 103 and figure 12 item 133 and column 12 lines 5 *et seq.*).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate the teachings of Yoshino et al. with the teachings of Kato et al. because in column 12 lines 5 - 13 Yoshino et al. discloses that the use of the bellows will reduce the size of the camera when not in use.

Regarding **claim 19**, as mentioned above in the discussion of claim 1, Kato et al. teaches all of the limitations of the parent claim. However, Kato et al. fails to disclose that the said sealing member is generally bellows shaped. Yoshino et al., on the other hand discloses that the sealing member is generally bellows shaped

More specifically, Yoshino et al. discloses that the sealing member is generally bellows shaped (figure 11 item 103 and figure 12 item 133 and column 12 lines 5 *et seq.*).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate the teachings of Yoshino et al. with the teachings of Kato et al. because in column 12 lines 5 - 13 Yoshino et al. discloses that the use of the bellows will reduce the size of the camera when not in use.

Regarding **claim 20**, as mentioned above in the discussion of claim 9, Kato et al. teaches all of the limitations of the parent claim. However, Kato et al. fails to disclose that the said sealing member is elastic. Yoshino et al., on the other hand discloses that the sealing member is elastic

More specifically, Yoshino et al. discloses that the sealing member is elastic (figure 11 item 103 and figure 12 item 133 and column 12 lines 5 *et seq.*).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate the teachings of Yoshino et al. with the teachings of Kato et al. because in column 12 lines 5 - 13 Yoshino et al. discloses that the use of the bellows will reduce the size of the camera when not in use.

Regarding **claim 21**, as mentioned above in the discussion of claim 9, Kato et al. teaches all of the limitations of the parent claim. However, Kato et al. fails to disclose that the said sealing member is generally bellows shaped. Yoshino et al., on the other hand discloses that the sealing member is generally bellows shaped

More specifically, Yoshino et al. discloses that the sealing member is generally bellows shaped (figure 11 item 103 and figure 12 item 133 and column 12 lines 5 *et seq.*).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to incorporate the teachings of Yoshino et al. with the teachings of Kato et al. because in column 12 lines 5 - 13 Yoshino et al. discloses that

the use of the bellows will reduce the size of the camera when not in use.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

KAWAMURA et al. (JP 2003-270707A) teaches a bellows connecting to an image sensor.

IKARI (US patent No. 2008/0079846) teaches a bellows connecting to an image sensor.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

Art Unit: 2622

examiner should be directed to Usman Khan whose telephone number is (571) 270-1131. The examiner can normally be reached on Mon-Thru 6:45-4:15; Fri 6:45-3:15 or Alt. Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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09/26/2008
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